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Water Management Planning in the South Saskatchewan River Basin

Approved by the Provincial Water Board under section 17(1) of the Water Act
on December 1, 2000 and with the following conditions:

The document is to be referred to as the "Planning Document". It is to be referred to as the "Plan".

The Plan is to be referred to as the "South Saskatchewan River Basin Water Management Planning Document".

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Definitions of Terms

used in

Water Management Planning

in the

South Saskatchewan River Basin

Water Management Planning Document - A document developed to support water management in the basin. Such maps, tables, plans, reports, and other documents may be referred to as the "Plan".

Basin - The area of land which receives all precipitation falling on it and which eventually flows into the same body of water.

Basin Support Organization - An organization established to support water management in the basin. Such organizations may be referred to as the "BOS".

Alberta Environment

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Allocation – As defined in the *Water Act*: *the volume, rate and timing of a diversion of water.*

Apportionable Flow – The St. Mary River originates in the Rocky Mountains in northern Montana and flows east and north into Alberta and into the Oldman River. The sharing of the waters of the St. Mary River is governed by the 1909 Boundary Waters Treaty between Canada and the United States. Under this agreement, during the April 1 to October 31 irrigation period, the U.S. is entitled to consume or divert up to 25% of the natural flow (see definition) of the St. Mary River for flow rates up to 666 cubic feet per second and 50% of the flow above 666 cubic feet per second. During the non-irrigation period the U.S. is entitled to consume or divert up to 50% of the natural flow. The apportionable flow used to determine Alberta's and Saskatchewan's entitlements under the 1969 Master Agreement on Apportionment is the natural flow of the South Saskatchewan River less U.S. entitlements in the St. Mary River.

Aquatic Environment – As defined in the *Water Act*: *...the components of the earth related to, living in or located in or on water or the beds or shores of a water body, including but not limited to*

- (i) *all organic and inorganic matter, and*
- (ii) *living organisms and their habitat, including fish habitat, and their interacting natural systems*

Basin Advisory Committee – Basin Advisory Committees (BACs) were established in the four sub-basins of the South Saskatchewan River Basin. The objective of the BACs during Phase 1 was to provide advice to Alberta Environment on implementing transfers of allocations of water under licence.

Membership on a BAC was designed to represent all sectors interested in water management in the sub-basin. Each sector was invited to select its own representatives(s) on the BAC.

Basin – The term “basin” is similar to the term “watershed”. That is, an area all drained by the same river or stream.

Basin Closure / Moratorium - Applications for licences for new allocations are no longer accepted. All licences that have been accepted for review by Alberta Environment at the time of a basin closure will be processed (but not necessarily approved). The only way to obtain a new licence is by arranging a water allocation transfer.

Director – For purposes of administration of the *Water Act*, certain staff in Alberta Environment, such as Approvals Managers, are designated as “Directors,” as the term is used in the *Act*.

Instream Need (IN) - This is the scientifically determined amount of water, flow rate or water level that is required in a river or other body of water to sustain a healthy aquatic environment or to meet human needs such as recreation, navigation, waste assimilation,

or aesthetics. An instream need is not necessarily the same as the natural flow. Instream needs are sometimes also referred to as “instream flow needs”, or IFN.

Instream Objective (IO) - This term describes a desired level of flow or water quality that has been established in consideration of both instream and withdrawal (e.g., municipal, irrigation, industry) needs. IO's have usually been set in response to fish habitat instream needs (the Fish Rule Curve) and/or water quality. IO's are included as a condition in some licences and operating policies whereby water cannot be withdrawn if the actual river flow is at or below the IO. In some reaches in the SSRB (e.g. southern tributaries of the Oldman River, Bow River below the Bassano Dam), “minimum flows” are in place. These are managed as if they are instream objectives. IO's can also be established as a “water conservation objectives” and incorporated into new licences.

Licence in Good Standing – This term is used in Alberta’s *Water Act*, but it is not defined. One of the issues that must be determined by the Director is whether or not “the allocation of water to be transferred is held under a licence in good standing” (*Water Act*, s. 81(7)(c)).

The licence has to be in good standing at the time the Director considers the application (that is, it already exists in good standing or the licence holder brings the licence into good standing prior to the time that the Director considers the application to transfer.)

Examples of when a licence is not in “good standing” are:

- breach of the Act
- subject to an investigation under the Act
- subject to an enforcement tool or prosecution
- breach of terms and conditions of the licence
- non-compliance with the terms and conditions i.e., did not build the diversion site within the time period

Local basin – Any smaller basin lying within one of the sub-basins.

Master Agreement on Apportionment - Schedule A of the 1969 Master Agreement on Apportionment for the South Saskatchewan River between Alberta and Saskatchewan, allows Alberta to "divert, store or consume" from the river system each year, a volume of water equal to one-half of the apportionable flow (see definition) of the South Saskatchewan River at the Alberta-Saskatchewan boundary. The remaining volume of flow must be allowed to pass downstream into Saskatchewan. The exception to this general rule is that Alberta is entitled to divert, store or consume a minimum of 2.1 million acre feet in any year. The effect of this exception is that during years when the volume of natural flow is less than 4.2 million acre feet (a rare occurrence), Alberta may pass less than one-half of the apportionable flow to Saskatchewan. If at any time during a year Alberta wants to divert, store or consume more than half the apportionable flow, a flow rate of 1,500 cubic feet per second (cfs) must be maintained at the Saskatchewan

border, unless the natural flow is less than 3,000 cfs, in which case half the natural flow is passed.

(There is no policy in Alberta as to the amount of water that each sub-basin of the SSRB must contribute to apportionment.)

Natural Flow – Natural flow is the flow in rivers that would have occurred in the absence of any man-made effects on or regulation of flow. For purposes of water management, natural flow is a calculated value based on the recorded flows of contributing rivers, a number of factors concerning the river reaches (e.g. evaporation, channel losses, etc.), and water diversions.

Preliminary Certificate – A commitment to issue a licence at some point in the future, if certain conditions are met.

Sub-basin – As used in this document, the drainage basin of either the Red Deer, Bow, Oldman, or South Saskatchewan Rivers in Alberta.

River – Any flowing water body in a naturally formed valley or channel, including streams, creeks, rivers, etc.

Steering Committee - This committee consists of senior Alberta government managers who provide direction and ensure water management planning in the SSRB is proceeding in a consistent and coordinated fashion. The committee reviews and provides comments on drafts of the water management plan and will guide it through to final approval.

Water Allocation Transfer – A water allocation transfer occurs after the holder of an existing licence in good standing for the withdrawal of water agrees to provide all or part of the allocation to another person or organization and the transfer is approved by Alberta Environment. When this occurs, the allocation is separated from the original land and a new licence (but with the seniority of the transferred allocation) is issued and attached to the new location. The Director can place conditions on the new licence created as a result of the transfer. Water allocation transfers can occur only if authorized by an Approved Water Management Plan or by the Lieutenant Governor in Council.

Water Conservation Holdback - From the *Water Act* (section 83(1)): *If the Director is of the opinion that withholding water is in the public interest to protect the aquatic environment or to implement a water conservation objective, and the ability to withhold water has been authorized in an applicable approved water management plan or order of the Lieutenant Governor in Council, the Director may withhold up to 10% of an allocation of water under a licence that is being transferred.*

The withholding occurs at the time the new licence created for the transferred allocation is issued (section 82(2) of the *Water Act*). That is, at the location of the original diversion, the allocation ceases to be diverted, and at the location of the new diversion, the allocation that can be diverted is 90% (or more) of the original allocation.

Water Conservation Objective (WCO) - From the *Water Act*: “*water conservation objective*” means the amount and quality of water established by the Director under Part 2, based on information available to the Director, to be necessary for the

- (i) protection of a natural water body or its aquatic environment, or any part of them,
- (ii) protection of tourism, recreational, transportation or waste assimilation uses of water, or
- (iii) management of fish or wildlife,

and may include water necessary for the rate of flow of water or water level requirements.

Only the Director can establish water conservation objectives.

A licence can be issued by the Director to the Government for the purpose of implementing a water conservation objective.

Working Group - The Working Group consists of Alberta government staff who provide the support and coordination of the process, manage technical analyses including computer simulations, conduct public consultation and create drafts of the water management plan, along with other planning products.